IN THE CLAIMS:

Please cancel Claims 1-9, 14, and 16-18, amend Claim 15, and add Claims 23 and 24 as set forth below.

Claims 1-9 (Canceled)

Claims 10-13 (Previously Canceled)

Claim 14 (Canceled)

15. (Currently Amended) A method of determining the presence of staphylococcal enterotoxin A gene in a sample, comprising:

contacting a target nucleic acid sequence which comprises a portion of the *S. aureus ent A* gene encoding staphylococcal enterotoxin A, with polymerase chain reaction reagents specific for the target nucleic acid sequence, the polymerase chain reaction reagents including a primer selected from the group consisting of a forward primer having a specific sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4 and combinations thereof, and a reverse primer having a specific sequence selected from the group consisting of SEQ ID NO: 5, SEQ ID NO: 6 and combinations thereof, a polymerase enzyme, and a nucleic acid probe, wherein the nucleic acid probe further comprises:

a nucleic acid sequence that hybridizes to a portion of the target nucleic acid sequence wherein the portion is unique to the nucleic acid encoding staphylococcal enterotoxin A, and wherein the nucleic acid sequence of the nucleic acid probe is selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and combinations thereof;

a reporter attached to a 5' end of the nucleic acid probe, said reporter capable of emitting a detectable signal;

a quencher attached to a 3' end of the nucleic acid probe capable of substantially quenching the reporter and prevent emission of the detectable signal, when the nucleic acid probe is intact, wherein the reporter becomes substantially unquenched when the nucleic acid probe is cleaved by the polymerase enzyme during amplification of the target nucleic acid sequence;

amplifying the target nucleic acid sequence by thermal cycling, wherein the thermal cycling will amplify the target nucleic acid sequence; and

measuring the level of fluorescence in the sample subsequent to thermal cycling, and further wherein the level of detectable signal is correlated to an amount of the nucleic acid encoding staphylococcal enterotoxin A in the sample, thereby quantitatively detecting the nucleic acid encoding staphylococcal enterotoxin A in the sample.

Claims 16-18 (Canceled)

Claims 19-22 (Previously Canceled)

23. (New) The method of claim 15, wherein the reporter is selected from the group consisting of 1-dimethylaminonaphthyl-5 sulfonate, 1-anilino-8-naphthalene sulfonate, 2-p-touidinyl-6-naphthalene sulfonate, 3-phenyl-7-isocyanatocoumarin, 9-isothiocyanatocacridine, N-(p-(2-benzoxazolyl)phenyl)maleimide, benzoxadiazoles, stilbenes, pyrenes, 6-carboxyfluorescein, tetrachloro-6-carboxyfluorescein, 2,7-dimethoxy-4,5-dichloro-6-carboxyfluorescein, hexachloro-6-carboxyfluorescein, 5-carboxyfluorescein, 6-carboxy-2',4,7,7'-tetrachlorofluorescein, carboxy-X-rhodamine and 6-carboxy-4',5'-dichloro-2',7'-dimethoxyfluorescein.

24. (New) The method of claim 15, wherein the quencher is selected from the group consisting of 6-carboxytetramethylrhodamine, tetramethylrhodamine and 4-(4-dimethylaminophenylazo) benzoic acid.